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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,784	03/21/2006	Jochen Wehner	WEHNER1PCT	9555

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EXAMINER	
LEONARD, MICHAEL L	
ART UNIT	PAPER NUMBER
1796	
MAIL DATE	DELIVERY MODE
12/29/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/572,784	WEHNER, JOCHEN	
	Examiner	Art Unit	
	MICHAEL LEONARD	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 3 and 6-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 6,046,297 to *Rosenberg et al.* in view of U.S Patent No. 5,340,652 to Sondhe et al.

Claims 4-5 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 6,046,297 to *Rosenberg et al.* in view of U.S Patent No. 5,340,652 to Sondhe et al as applied to claim 19 and is applied here as such in view of U.S. Patent No. 3,217,536 to Motsinger et al.

Claim 21 is rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 6,046,297 to *Rosenberg et al.* in view of U.S Patent No. 5,340,652 to Sondhe et al as applied to claim 20 and is applied here as such in view of U.S. Patent No. 3,217,536 to Motsinger et al.

Response to Arguments

Applicant's arguments filed 10/29/2009 have been fully considered but they are not persuasive.

The applicants' argued that the instant claimed require an order of mixing that Rosenberg et al. fails to teach is not persuasive. Rosenberg discloses a two-component composition, a curable polymer and a curing agent (Abstract). Rosenberg discloses that the composition is mixed (Column 6, lines 63-65). The claimed

components are present in Rosenberg and have been set forth in the previous rejection. The language of the instant claims does not specify an mixing order, but merely that the composition contains the three components. Therefore, it appears that the order of mixing of the components in the language presently used is not a limitation. Furthermore, the claimed language presents an isocyanate component and an isocyanate-reactive component, which Rosenberg discloses and does not include process parameters that would enable a person of ordinary skill in the art to distinguish the claimed language from the Rosenberg disclosure.

The examiner disagrees with the applicants' argument that one of ordinary skill in the art understands that altering the order of introduction of various reactants to a chemical reaction alters the final product. The process of Rosenberg is more controlled by making the NCO-terminated polyurethane prepolymer, that upon further exposure to the amine curative produces a gel coat with a desirable reduction of propensity to crack (Column 2, lines 43-45), which would be a desirable characteristic of the polyurethane when applied to an epoxy resin as with the Sondhe reference. The process of Rosenberg produces the same polyurethane top-coat as the claimed invention because all three components are present and the isocyanate-reactive components react in a controlled manner with the isocyanate component to form a final gel coat polyurethane material. The applicants' allege that there is no isocyanate present after the reaction with the polyol because the free isocyanate is removed from the mixture. However, the examiner would like to point out the isocyanate is reacted in excess of the polyol to

produce an NCO-terminated prepolymer, the removal of the excess isocyanate is an production improvement due to the toxicity of residual isocyanate.

The applicants' further argument that when mixed in the order disclosed by Rosenberg the present invention is not produced is not persuasive. No factual evidence of this is supplied or found in the specification as originally filed. Only allegations that the order of mixing produces different results are found in the remarks. Arguments do no replace evidence where evidence is necessary (See MPEP 2145 I). While it is alleged in the remarks that a reaction did not occur between the amine free prepolymers and the aromatic amine, factual evidence is found in Rosenberg to the contrary (Examples 1-6, Disclosure).

The applicants' further argued that Rosenberg do not teach properties of the composition is not persuasive since the properties (adhesion and lamination time) are not claimed.

The applicants' further argue that Rosenberg is nonanalogous art because the Rosenberg polyurethane is castable. However, it has been held that a prior art reference must either be in the field of the applicants' endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d (fed. Cir. 1992). In this case, Rosenberg is concerned with the same field of endeavor, namely polyurethane composition cured with aromatic amines. Furthermore, a person having ordinary skill in the art would recognize that just because a castable polyurethane is disclosed, this is analogous art

to the instant application since castable is another word for moldable as in paragraph 3 of the specification.

The applicants' argument that Sondhe et al. do not teach the aromatic amine is not persuasive. Rosenberg et al. teaches the aromatic amines. Sodhe is relied on for the epoxy resin layer, not the teaching for the aromatic amine.

The applicants' arguments' that Motsinger do not teach a wind vane for a wind power plant is not persuasive. A wind vane is a broad term for a structure that moves with the wind and is not required on a wind power plant. The requirement that the wind vane be on a wind power plant is not claimed and is considered intended use. Motsinger et al. teaches a similar composition on a wind vane. Furthermore, the applicants' changed the language from wind vane to rotor vane, but from the instant disclosure (0081), the language is interchangeable and thus the Motsinger reference still reads on claimed 21.

The applicants' arguments that the Rosenberg polyurethane is not designed for a synthetic reference is not persuasive for the reasons presented above as well as the following reasons presented by the examiner from personal work experience. The Rosenberg et al. reference discloses polyurethanes suitable for the production of industrial rolls such as paper mill rolls. Industrial sized polyurethane paper mill rolls consist of two layers, a base layer, which is normally an epoxy resin, and a topcoat layer which is normally the polyurethane resin disclosed by Rosenberg. A person of ordinary skill in the art would understand that when applying the polyurethane topcoat to

the epoxy basecoat substantial adhesion between the synthetic coat and the gel coat needs to be adequate in order to avoid catastrophic disasters once the industrial roll is put into place in a paper making facility. Futhermore, appropriate adhesion between the basecoat and topcoat is achieved because the polyurethane coat is in a gel state as it is being applied to the epoxy basecoat, which provides a sufficient lamination time (because of the components in the polyurethane topcoat) that enables the roll to be completely covered before finally curing the entire roll to be shipped for paper making. At the time of the invention, a person of ordinary skill in the art would see the correlation between the two polyurethane topcoats of Rosenberg and the broad instant claims and it would have been obvious to substitute one for the other when applying the topcoat to a synythetic resin such as an epoxy resin.

Response to Amendment

The Affidavit under 37 CFR 1.132 filed 10/13/2009 is insufficient to overcome the rejection of claims 2-21 based upon U.S. Patent No. 6,046,297 to *Rosenberg et al.* in view of U.S Patent No. 5,340,652 to Sondhe et al as applied to claim 20 and is applied here as such in view of U.S. Patent No. 3,217,536 to Motsinger et al. as set forth in the last Office action because: of the reasons presented above in the response to arguments for bullet points 5-8. Furthermore, with regard to bullet point 16, the examiner would like to add that there are no instances in the instant claims where process parameters are incorporated, such as temperature, etc. Simply because, the polyurethane prepolymer is solid at room temperature does not deter a person of

ordinary skill in the art to melt the prepolymer and then react with the amine curing agent to produce the final polyurethane product based on the claim language. Also, the prepolymer is storage-stable due to the reduced residual monomeric isocyanate content and there are no instances in the claim language that suggest that a prepolymer cannot be made, stored, and then during processing melted and further reacted with amine curing agent to form a gel-type material. The broad language of the instant claims suggests an isocyanate-reactive component (polyols and amines) and an isocyanate component and as long as all three components are there, the polyurethane of Rosenberg is the same as the polyurethane of the instant application unless there was some showing of an unexpected result, which the applicants have failed to show with the Rule 1.132 Affidavit.

The Affidavit only showed that the prepolymer produced from Rosenberg's reactants was solid at room temperature. It failed to show that when melted and cured with the aromatic amine, the polyurethane of Rosenberg is different than the instantly claimed polyurethane.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LEONARD whose telephone number is (571)270-7450. The examiner can normally be reached on Mon-Fri 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL LEONARD/
Examiner, Art Unit 1796

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 1796